

5226781



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D6101-001
Job Sheet 201627



Part No: D6101-001

Job Qty: 40 pcs

Part Name: Saddle Billet



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/8/19

Job Tracking No:

Due Date: 10/31/19

Created By: Chantal Lavoie

Type: Stock

Description:

Note: DWG REV B

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard	Workcenter/Supplier		Sign-off
					Setup Hrs Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	40 pcs	10/31/19	10/31/19	0.00 0.00	Purchasing - 1		
						Purchasing - 2		
						Purchasing - 3		
110	Packaging 2-1 - Recelve - B4B	40 pcs	10/31/19	10/31/19	0.00 0.00	Packaging 2 - 1 - B4B		
						Packaging 2 - 2 - B4B		
						Packaging 2 - 3 - B4B		
						Packaging 2 - 5 - B4B		
						Packaging 2 - 4 - B4B		
						Packaging 2 - 6 - B4B		
						Packaging 2 - 7 - B4B		
						Packaging 2 - 8 - B4B		
						Packaging 2 - 9 - B4B		
						Packaging 2 - 10 - B4B		
						Packaging 2 - 11 - B4B		
						Packaging 2 - 12 - B4B		
						Packaging 2 - 13 - B4B		
						Packaging 2 - 14 - B4B		
						Packaging 2 - 15 - B4B		
						Packaging 2 - 16 - B4B		
						Packaging 2 - 17 - B4B		
						Packaging 2 - 18 - B4B		
						Packaging 2 - 19 - B4B		
						Packaging 2 - 20 -		

Plex 10/8/19 7:59 AM Dart.Lavoie.Chantal

				B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
120 QC 18	40 pcs	10/31/19	0.00 0.00	QC 18 - 12	
				QC 18 - 14	
				QC 18 - 22	
				QC 18 - 25	
				QC 18 - 48	
				QC 18 - 58	
				QC 18 - 61	DAS
				QC 18 - 9	81
				QC 18 - 81	9-89
					OCT 27 2019
130 Packaging 3-1 - Stock - B4B	40 pcs	10/31/19	0.00 0.00	Packaging 3 - 1 - B4B	19-11-01
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	

				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
140	QC 21 - SA	40 pcs	10/31/19	0.00 0.00	QC 21 - SA - 21
					QC 21 - SA - 70
					QC 21 - SA - 53

DAS
21
9-58

NOV 01 2019

Part Op 100 - Issue P/O: _____ a) Description: Aluminum billet b) 6.00" x 6.250" x 2.00" thick c) Tolerance on length
 Descriptions: are +0.030"/-0.000" E +/- 0.008" d) Grain direction along 6.00" length e) Material: 7075-T7351 (QQ-A-250/12)
 110 - (Receive & Inspect for Damage & Mat'l Certs), Ensure material certification is attached
 120 - Ensure Material certification comply to Dwg D
 130 - (Identify as per dwg & Stock Location: _____), LOCATION: MAT042
 140 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D6101-001P	7075-T7351 2X6X6.25	40 pcs (1 ea)	100-Purchasing	S226777 vm.

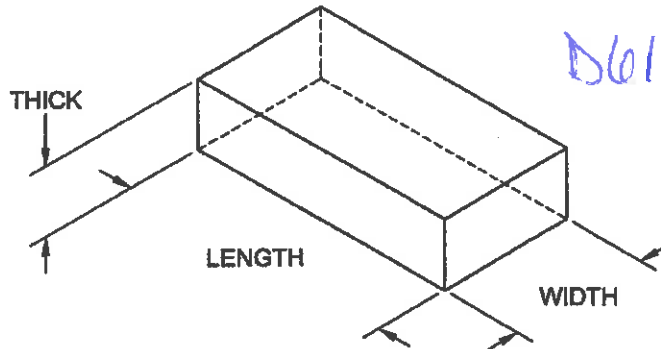
Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	D6101-001P	40	0	0

Part Specifications	
Specifications could not be found.	

Plex 10/8/19 7:59 AM Dart.Lavoie.Chantal

SPECIFICATION CONTROL DRAWING



Line 1
D6101-001

PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

B ACCEPTABLE SPECIFICATIONS FOR 7075-T7351 ALUMINUM ARE AMS-QQ-A-250/12, QQ-A-250/12, OR ASTM B209

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length
D6101-015	7075-T7351 (QQ-A-250/12)	9.450	6.250	2.500	Along 9.450 Length
D6101-017	7075-T7351 (QQ-A-250/12)	6.350	6.250	2.250	Along 6.350 Length

RELEASED
09/07/15/W

B	ADDED D6101-015/-017, ADD ASTM B209	RF	09.04.23
A	NEW ISSUE	CP	01.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D6101	SHEET 1 OF 1
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	SADDLE BILLET, 7075	NTS
DATE	09.04.23	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044728



Supplier: MEC002-VU
Metaux Castle
P.O. Box 4090 Stn A
Toronto
ON
M5W OE9 Canada

PO No: POHB044728

PO Date: 10/8/19

Due Date: 10/31/19

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Lavoie, Chantal
Phone: 613-623-5200 Ext: 242
Fax: 613-632-1053
clavoie@dartaero.com

OCT 10 2019

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	201627	D6101-001P	72746	7075-T7351 2X6X6.25 AS PER DWG D6101 REV. B SIZE: 6.00" X 6.250" X 2.00" THICK GRAIN DIRECTION ALONG 6.00" LENGHT MATERIAL: 7075-T7351 QQ-A-250/12 TOLERANCE AS PER QUOTE +.030"/-.000"	Firmed	-	10/31/19	40 pcs	40 pcs	40 pcs	\$29.57/pcs	\$1,182.80
2	201628	D6101-003P	72742	7075-T7351 2X6.25X7.875 : Various STC's AS PER DWG D6101 REV. B SIZE: 7.875" X 6.250" X 2.00" THICK GRAIN DIRECTION ALONG 7.875" LENGHT MATERIAL: 7075-T7351 QQ-A-250/12 TOLERANCE AS PER QUOTE +.030"/-.000"	Firmed	-	10/31/19	20 pcs	20 pcs	20 pcs	\$38.82/pcs	\$776.40

OCT 27 2019

OCT 27 2019



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044728



Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
3	201629	D6101-007P	72743	7075-T7351 8.25X7.75X2.5 : Various STC's AS PER DWG D6101 REV. B MATERIAL: 7075-T7351 (QQ-A-250/12) SIZE: 7.750" X 8.250" X 2.50" THICK GRAIN DIRECTION ALONG: 7.750" LENGTH TOLERANCE AS PER QUOTE +.030"- .000"	Firmed	-	10/31/19	20 pcs	0 pcs 20 pcs V/m	20 pcs	\$61.72/pcs	\$1,234.40
											OCT 27 2019	
4	201631	D6103-003P		Round Alum Billet : Various STC's AS PER DWG D6103 REV. B MATERIAL: 7075-T7351 AS PER QQ-A-225/9 SIZE: 3.500" X 12.500" LONG	Firmed	-	10/31/19	20 pcs	0 pcs 20 pcs V/m	20 pcs	\$60.40/pcs	\$1,208.00
											OCT 27 2019	
Grand Total:												\$4,401.60

Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable). No Raw Metals from China or Soviet Bloc Countries. (DFARS)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program.

A049 supplier awareness.

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/8/19 2:48 PM Dart.Lavoie.Chantal



Castle Metals®

A. M. Castle & Co.

PACKING SLIP/
CERTIFICATE OF CONFORMANCE

Page 1 of 2

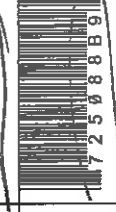
Shipment No:4017229

Ship From: A. M. CASTLE & CO. 2150 ARGENTIA ROAD MISSISSAUGA, ON L5N 2K7 CAN		Sold To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	Ship To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN	Deliver To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA
Date Shipped 16-OCT-19	F.O.B. ORIGIN	Freight Terms Prepaid	Carrier LOCAL_FLEET	BOL No 4017229-5

Shipment Details	Final Destination Branch - TOR
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Order No 5621445	Line No 1	Item No 72746	Description 2.0000.PL.7075.T7351.ALUMINUM.GRAIN TO RUN ALON 6.0000 IN.6.2500.6.0000 SPECIFICATIONS: AMS-QQ-A-250/12
Purchase Order No POHB044728	Part Number YOUR ITEM NUMBER: D6101-001	Ordered Qty 40.00 PCS	Invoice Qty 40.00 PCS

Details	ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #'S Email P/s and certs to: clavoie@artaero.com END USER: DART.AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS		
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Delivery No. 122930430	Mill/Source CONSTELLUM ROLLED PRODUCTS	Heat Number  72508836	Mech Id 17	PCS 17	Width (IN) 2.0000	Length (IN) 6.0000	Shipped Qty(LBS) 131.6072
122930430	KAISER ALUMINUM	 72508889		23	2.0000	6.0000	178.0568



A. M. Castle & Co.

PACKING SLIP/
CERTIFICATE OF CONFORMANCE

Page 2 of 2

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material out to the correct size, or material rejected by the customer cannot be returned for credit.	
Reviewed by Authorized Castle Metals Representative:	Date: <u>10/16/2019</u>





Constellium Rolled Products
Ravenswood, LLC

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A M CASTLE CO
3050 SO HYDRAULIC
WICHITA KS
67216
US

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A M CASTLE
1420 KENSINGTON ROAD, SUITE 220
OAK BROOK IL
60523
US

A M CASTLE		110777239		4776		INCLUSION		Serial:20190708-0110777239		Pg 1of3		
CUSTOMER PURCHASE ORDER NO. & ITEM 503663						Constellium ORDER NO. 274033						
ALLOY 7075	CLAD	TEMPER T7351	GAUGE 2.00000 in 50.80 mm	WIDTH 48.50000 in 1,232 mm	LENGTH 144.50000 in 3,670 mm	CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA  Dave Dunbarger - Laboratory Manager						
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH												
CUSTOMER SPECIFICATION AMS 4078K												
PART NUMBER 752237			B/L NUMBER 120776		DATE SHIPPED 07/09/2019							
WT. SHIPPED 8535.000 LB			NO. OF PIECES 000006		GOVT. CONTRACT NO.							

ALL LOTS ON THIS CERTIFICATION ALSO CONFORM TO THE FOLLOWING REQUIREMENTS:

ASTM B594 REV 13 2013 100% SONIC W/ 0.12" DEADZONE Class A
AMS QQ-A-250/12A
AMS-STD-2154C 2017 TYPE1 CLASS A 100% SONIC MINUS DEADZONE
ASTM B209-14
BSS-7055B 2013 CLASS A 100% SONIC TESTED MINUS DEADZONE
CMMP025 REV V
CST1006 REV E 2011 CLASS A 100% SONIC MINUS DEADZONE
DPS 4.713 REV AK 2012 CLASS A 100% SONIC MINUS DEADZONE
GAMPS 9101 REV B 2006 CLASS A 100% SONIC MINUS DEADZONE
MMS 159T
PS 21211P 2010 CLASS A 100% SONIC MINUS DEADZONE

Load Details

Package	Net Lbs	Kg	Lot	Piece	Serial	Parent Lot
1002095538	1,425.000	646.369	9456036	01		
1002095538	1,425.000	646.369	9456036	02		
1002095539	1,425.000	646.369	9456036	03		
1002095576	1,420.000	644.101	9456037	01		
1002095576	1,420.000	644.101	9456037	02		
1002095577	1,420.000	644.101	9456037	03		

Lot: 9456036 (See test results below)

Tensile - Room Temperature (US)

Direction	Tests	Ultimate (KSI)		Yield (KSI)		Elongation (%)		Report
		Min	Max	Min	Max	Min	Max	
LT	02	73.7	74.2	63.3	63.9	12.0	12.0	





Constellium Rolled Products
Ravenswood, LLC

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A M CASTLE CO
3050 SO HYDRAULIC
WICHITA KS
67216
US

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A M CASTLE
1420 KENSINGTON ROAD, SUITE 220
OAK BROOK IL
60523
US

A M CASTLE		110777239		4776		INCLUSION		Serial:20190708-0110777239		Pg 2of3																															
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PART NUMBER 752237				B/L NUMBER 120776				DATE SHIPPED 07/09/2019																																	
W.T. SHIPPED 8535.000 LB				NO. OF PIECES 000006				GOVT. CONTRACT NO.																																	
CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA <i>[Signature]</i> Dave Dunbarger - Laboratory Manager																																									
Tensile - Room Temperature (Si) <table border="1"><thead><tr><th colspan="2"></th><th colspan="2">Ultimate (N/MM2)</th><th colspan="2">Yield (N/MM2)</th><th colspan="2">Elongation (%)</th><th colspan="2">Report</th></tr><tr><th>Direction</th><th>Tests</th><th>Min</th><th>Max</th><th>Min</th><th>Max</th><th>Min</th><th>Max</th><th colspan="2"></th></tr></thead><tbody><tr><td>LT</td><td>02</td><td>508</td><td>512</td><td>436</td><td>441</td><td>12.0</td><td>12.0</td><td colspan="2"></td></tr></tbody></table>														Ultimate (N/MM2)		Yield (N/MM2)		Elongation (%)		Report		Direction	Tests	Min	Max	Min	Max	Min	Max			LT	02	508	512	436	441	12.0	12.0		
		Ultimate (N/MM2)		Yield (N/MM2)		Elongation (%)		Report																																	
Direction	Tests	Min	Max	Min	Max	Min	Max																																		
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Conductivity % IACS MIN 40.1 MAX 40.7 % MS/M MIN 23.3 MAX 23.6																																									
Chemistry (Actual) <table border="1"><thead><tr><th></th><th>SI</th><th>FE</th><th>CU</th><th>MN</th><th>MG</th><th>CR</th><th>ZN</th><th>TI</th><th>ZR</th></tr></thead><tbody><tr><td>Core</td><td>0.03</td><td>0.13</td><td>1.54</td><td>0.03</td><td>2.58</td><td>0.21</td><td>5.82</td><td>0.03</td><td>0.01</td></tr></tbody></table>													SI	FE	CU	MN	MG	CR	ZN	TI	ZR	Core	0.03	0.13	1.54	0.03	2.58	0.21	5.82	0.03	0.01										
	SI	FE	CU	MN	MG	CR	ZN	TI	ZR																																
Core	0.03	0.13	1.54	0.03	2.58	0.21	5.82	0.03	0.01																																
OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER																																									
All material contained in this lot was cast and manufactured in the USA																																									
Lot: 9456037 (See test results below) Tensile - Room Temperature (US) <table border="1"><thead><tr><th colspan="2"></th><th colspan="2">Ultimate (KSI)</th><th colspan="2">Yield (KSI)</th><th colspan="2">Elongation (%)</th><th colspan="2">Report</th></tr><tr><th>Direction</th><th>Tests</th><th>Min</th><th>Max</th><th>Min</th><th>Max</th><th>Min</th><th>Max</th><th colspan="2"></th></tr></thead><tbody><tr><td>LT</td><td>02</td><td>73.7</td><td>73.9</td><td>63.1</td><td>63.7</td><td>12.5</td><td>12.5</td><td colspan="2"></td></tr></tbody></table>														Ultimate (KSI)		Yield (KSI)		Elongation (%)		Report		Direction	Tests	Min	Max	Min	Max	Min	Max			LT	02	73.7	73.9	63.1	63.7	12.5	12.5		
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AEROSPACE																																									

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A M CASTLE CO
 3050 SO HYDRAULIC
 WICHITA KS
 67216
 US

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A M CASTLE
 1420 KENSINGTON ROAD, SUITE 220
 OAK BROOK IL
 60523
 US

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PART NUMBER 752237			B/L NUMBER 120776		DATE SHIPPED 07/09/2019																																	
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Tensile - Room Temperature (SI) <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th colspan="2"></th> <th colspan="2">Ultimate (N/MM2)</th> <th colspan="2">Yield (N/MM2)</th> <th colspan="2">Elongation (%)</th> <th>Report</th> </tr> <tr> <th>Direction</th> <th>Tests</th> <th>Min</th> <th>Max</th> <th>Min</th> <th>Max</th> <th>Min</th> <th>Max</th> <th></th> </tr> </thead> <tbody> <tr> <td>LT</td> <td>02</td> <td>508</td> <td>510</td> <td>435</td> <td>439</td> <td>12.5</td> <td>12.5</td> <td></td> </tr> </tbody> </table>														Ultimate (N/MM2)		Yield (N/MM2)		Elongation (%)		Report	Direction	Tests	Min	Max	Min	Max	Min	Max		LT	02	508	510	435	439	12.5	12.5	
		Ultimate (N/MM2)		Yield (N/MM2)		Elongation (%)		Report																														
Direction	Tests	Min	Max	Min	Max	Min	Max																															
LT	02	508	510	435	439	12.5	12.5																															
Conductivity % IACS MIN 39.8 MAX 40.5 % MS/M MIN 23.1 MAX 23.5																																						
Chemistry (Actual) <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th></th> <th>SI</th> <th>FE</th> <th>CU</th> <th>MN</th> <th>MG</th> <th>CR</th> <th>ZN</th> <th>TI</th> <th>ZR</th> </tr> </thead> <tbody> <tr> <td>Core</td> <td>0.08</td> <td>0.13</td> <td>1.54</td> <td>0.03</td> <td>2.58</td> <td>0.21</td> <td>5.82</td> <td>0.03</td> <td>0.01</td> </tr> </tbody> </table>													SI	FE	CU	MN	MG	CR	ZN	TI	ZR	Core	0.08	0.13	1.54	0.03	2.58	0.21	5.82	0.03	0.01							
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Core	0.08	0.13	1.54	0.03	2.58	0.21	5.82	0.03	0.01																													
OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER																																						
All material contained in this lot was cast and manufactured in the USA																																						
QUALITY TEXTS: AMC CA-15413A R 11																																						
THIS TEST REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY OR AUTHORIZED QUALITY DELEGATE. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. CHEMISTRY BY OES: ARKSPARK CHEMISTRIES REPORTED IN PERCENTAGE BY WEIGHT WHEN FRACTURE TOUGHNESS TEST REQUIRED, TESTED PER ASTM E399. WHEN SMOOTH FATIGUE TESTED, TESTED PER ASTM E466. WHEN TENSILE TEST REQUIRED, TESTED PER ASTM E8; B557 DUNS Number: 090570149; CAGE Code: 1YWLS 100% Type I (Immersion sonic) used when ultrasonic inspection performed. Mercury is not a normal contaminant in aluminum alloys and neither mercury nor any of its compounds were utilized in the manufacture of our product.																																						
P-860-155D REVISED: 01 2018																																						



SHIP TO:

A M CASTLE & CO
3050 SOUTH HYDRAULIC
WICHITA, KS 67216

SOLD TO:

AM CASTLE & CO- SOLD TO
1420 KENSINGTON RD
SUITE 220
OAK BROOK, IL 60523

KAISER ALUMINUM

Trentwood Works

PO Box 15108, Spokane Valley WA 99215-5108

15000 E Euclid, Spokane Valley WA 99216

Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number

4571034

CUSTOMER PO NUMBER: 500558-1	WORK PACKAGE:	CUSTOMER PART NUMBER: 752237	SHIP RUN/LOAD: 104662/17	GOVT CONTRACT NUMBER:
KAISER ORDER NO: 1287647-1	SHIP DATE: 30-JUN-2019	ALLOY: 7075	CLAD: BARE	TEMPER: T7351
WEIGHT SHIPPED: 2888 LB (1309.99 KG)	QUANTITY: 2 PCS EST.	TRUCK BIL #: 2081698	GAUGE: 2.0000 IN (50.8000 MM)	PRODUCT DESCRIPTION: KaiserSelect Plate
			DIAMETER/WIDTH: 48.500 IN (1231.9 MM)	LENGTH: 144.500 IN (3670.3 MM)

MHU 2351593: LOT 725088B9: 2 pieces;

Certified Specifications

AMS 4078/RevK
ASTM B 209/Rev14
BSS 7055/RevB
DPS 4.713/RevAK
GSS16100/RevG/Amd1
PS 21211/RevP

AMS-QQ-A-250/12/RevA

ASTM B 594/Rev13
CMMP 025/RevV
EAC MS1011/RevE
MMS 159/RevT

AMS-STD-2154/RevC
BAC 5439/RevJ
CSTI 006/RevE
GAMPS 9101/RevB/AmdSCN1
PPS 20.04/Rev7

Test Code: 4297

Lot: 725088B9

Cast 863

Drop 01

Test Results

Ingot 1

Parent Lot: 319644B1

Melted in USA

(ASTM E8/B557)

(EN 2002-1)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	73.1 : 74.1 (504 : 511)	62.5 : 63.1 (431 : 435)	12.5 : 12.8

(ASTM E1004)

(EN 2004-1)

Conductivity %IACS :	40.2 Min	40.2 Max
(MS/M) :	23.3 Min	23.3 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual(wt%)	0.05	0.12	1.6	0.02	2.6	0.20	5.8	0.02	0.01	0.01	TOT 0.03





CERTIFIED TEST REPORT

Serial Number
4571034

Trontwood Works
PO Box 15108, Spokane Valley WA 99215-5108
15000 E Euclid, Spokane Valley WA 99216
Phone: (800) 367-2586

ALLOY LIMITS

	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075												
MIN(wt%)	0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	EACH	0.05
MAX(wt%)	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder

ORDER COMMENTS

AMC CA-15413A R 11

7055

TEST NOTES

Metal represented by this test report was 100% Type I
(immersion) ultrasonically tested from one side with 3mm
dead zones top and bottom and meets the Class A and Class B
requirements of all specifications referenced on this test
report. No surface marking of sonic indications is
performed.

CERTIFICATION

Kaiser Aluminum, Trontwood Works, is ISO 9001, AS9100, and ISO 14001 certified, and hereby certifies that all material shipped under this order:
* has been inspected, tested, and found to be in conformance with the requirements of the specifications indicated herein.

- All test equipment and measuring devices are calibrated and certified in accordance with applicable specifications. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. Reported elongation values have been measured as elongation at fracture.
- * was melted in the United States of America or a qualifying country per DFARS 225.672-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content.
- * has been thermally processed in compliance with AMS 2772, where applicable.
- * is mercury free, within the limits of detection of ASTM E1215 (<1ppm).
- * is in compliance with RoHS 2, European Union Directive 2011/65/EU.
- * is in compliance with European Chemical Agency, ECHA, REACH regulations, (EC) No 1907/2006, and Kaiser regularly monitors these regulations for updates.
- * is free of Conflict Minerals, as defined in Section 15.2 of the Dodd-Frank Act.
- * is free of weld repairs.
- * meets the reporting requirements of EN10204, Type 3.1.

Any warranty is limited to that shown on Kaiser Aluminum's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of the Kaiser Aluminum laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law.



Michael Pesko

Michael Pesko, PT Lab Process Engineer

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: D6101-001
DATE: OCT 27 2019

PO / BATCH NO.: POHBOU4728/
5220777

MATERIAL CERT REC'D: Yes
QUANTITY RECEIVED: 40 pcs
QUANTITY INSPECTED: 40 pcs
QUANTITY REJECTED: -

THICKNESS ORDERED: 2"
THICKNESS RECEIVED: 2"
SHEET SIZE ORDERED: -
SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	AMS-QQ-A-250/12A
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	HT: 9456036 / 72508889
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: _____	DAS 81 9-89	SIGNED OFF BY: _____	
DATE: <u>OCT 27 2019</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in